10/621,412

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=> file biosis medline caplus wpids uspatfull
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*** YOU HAVE NEW MAIL ***

=> s purif? (4a) RNA
L1         23672 PURIF? (4A) RNA

=> s l1 and (cellulose or acetylcellulose or triacetylcellulose or cellulose acetate)
L2          5843 L1 AND (CELLULOSE OR ACETYLCELLULOSE OR TRIACETYLCELLULOSE OR
                 CELLULOSE ACETATE)

=> s l2 and solid phase
L3          2744 L2 AND SOLID PHASE

=> s l3 and beads
L4          1878 L3 AND BEADS

=> s l4 and surfactant
L5           485 L4 AND SURFACTANT

=> s l5 and adsorbing
L6             7 L5 AND ADSORBING

=> s l6 and desorbing
L7             1 L6 AND DESORBING

=> d l1 bib abs

L1   ANSWER 1 OF 23672  BIOSIS  COPYRIGHT (c) 2006 The Thomson Corporation  on
     STN
AN   2006:305454  BIOSIS
DN   PREV200600299724
TI   Identification of a putative mitochondrial RNA polymerase from Physarum
     polycephalum: characterization, expression, purification, and
     transcription in vitro.
AU   Miller, Mara L.; Antes, Travis J.; Qian, Fang; Miller, Dennis L. [Reprint
     Author]
CS   Univ Texas, Dept Cell and Mol Biol, 2601 N Floyd Rd, Richardson, TX 75080
     USA
     dmiller@utdallas.edu
SO   Current Genetics, (APR 2006) Vol. 49, No. 4, pp. 259-271.
     CODEN: CUGED5. ISSN: 0172-8083.
DT   Article
LA   English
ED   Entered STN: 7 Jun 2006
     Last Updated on STN: 7 Jun 2006
AB   Mitochondrial RNA polymerases ( mtRNAPs) are necessary for the biogenesis
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of mitochondria and for proper mitochondrial function since they transcribe genes on mtDNA for tRNAs, rRNAs, and mRNAs. The unique type of RNA editing identified in mitochondria of Physarum polycephalum is thought to be closely associated with transcription, and as such, RNA editing activity would be expected to be closely associated with the mtRNAP. In order to better characterize the role of mtRNAPs in mitochondrial biogenesis and to determine the role of the Physarum mtRNAP in RNA editing, the cDNA of the Physarum mtRNAP was identified using PCR and degenerate primers designed from conserved motifs in mtRNAPs. This amplification product was used to screen a cDNA library for the cDNA corresponding to the Physarum mtRNAP. A cDNA corresponding to a 3.2 kb transcript containing a 997 codon open reading frame was identified. The amino acid sequence inferred from the open reading frame contains motifs characteristic of mtRNAPs. To confirm that a cDNA for an RNA polymerase had been isolated, the cDNA was expressed in E. coli as an N-terminal maltose binding protein (MBP) fusion protein. The fusion protein was purified by afinity chromatography and shown to have DNA-directed RNA polymerase activity. This functional mtRNAP will be useful for in vitro studies of mitochondrial transcription and RNA editing.

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=> d his
     (FILE 'HOME' ENTERED AT 12:13:37 ON 13 JUN 2006)

     FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 12:14:22 ON
     13 JUN 2006
L1         23672 S PURIF? (4A) RNA
L2          5843 S L1 AND (CELLULOSE OR ACETYLCELLULOSE OR TRIACETYLCELLULOSE OR
L3          2744 S L2 AND SOLID PHASE
L4          1878 S L3 AND BEADS
L5           485 S L4 AND SURFACTANT
L6             7 S L5 AND ADSORBING
L7             1 S L6 AND DESORBING

=> s l3 and adsorbing
L8            66 L3 AND ADSORBING

=> s l8 and desorbing
L9             4 L8 AND DESORBING

=> dup rem l9
PROCESSING COMPLETED FOR L9
L10            4 DUP REM L9 (0 DUPLICATES REMOVED)

=> d l10 bib abs 1-4

L10  ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2005:402693  CAPLUS
DN   142:426392
TI   Separating and purifying nucleic acid with nucleic acid-adsorbing
     porous membrane of cellulose derivative
IN   Kyono, Yoshiki; Makino, Yoshihiko
PA   Fuji Photo Film Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 24 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.          DATE
     ---------------     ----   --------    --------------------     --------
PI   JP 2005118017        A2    20050512    JP 2003-359901           20031020
PRAI JP 2003-359901              20031020
AB   A method and apparatus for purification of nucleic acids via adsorption are
     disclosed. The nucleic acids purification unit consists of a nucleic acid
     separation purification cartridge equipped with a nucleic acid-adsorbing
     porous membrane, container which possesses at least 2 openings containing the
     nucleic acid-adsorbing porous membrane, and pressure difference
     generator attached to one of the openings. The method comprises the steps
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of: (1) **adsorbing** the nucleic acid to the **solid** **phase** by allowing a sample solution containing the nucleic acid to come into contact with the nucleic acid-**adsorbing** **solid** **phase**; (2) washing the **solid** **phase** by allowing a washing solution to come into contact with the **solid** **phase**, while the nucleic acid is adsorbed to the **solid** **phase**; and (3) **desorbing** the nucleic acid from the **solid** **phase** by allowing a recovering solution to come into contact with the **solid** **phase**. Also part of the apparatus are a container, and a device for creating pressure gradient such pump. The porous membrane is made of **cellulose** derivative that dissolves within 48 h, but not in 1 h, when soaked in 5mL trifluoroacetic acid, or dissolves within 1 h when soaking in trifluoroacetic acid, but not within 24 h in dichloro-methane 5mL. A mixed porous membrane of **triacetylcellulose** and biacetyl **cellulose** was successfully used to **purify** DNA and **RNA**.

L10 ANSWER 2 OF 4 USPATFULL on STN
AN 2005:131196 USPATFULL
TI Method for isolating and purifying nucleic acid, cartridge for isolating and purifying nucleic acid, and kit isolating and purifying nucleic acid
IN Iwaki, Yoshihide, Asaka-shi, JAPAN
PA Fuji Photo Film Co., Ltd., Minami-Ashigara-shi, JAPAN (non-U.S. corporation)
PI US 2005112656 A1 20050526
AI US 2004-974681 A1 20041028 (10)
PRAI JP 2003-371783 20031031
JP 2004-293641 20041006
DT Utility
FS APPLICATION
LREP BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747, US
CLMN Number of Claims: 38
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 1834
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides a method for isolating and purifying nucleic acids, which comprises: (1) passing a sample solution containing a nucleic acid through a nucleic acid **adsorbing** porous membrane to adsorb the nucleic acid to the nucleic acid **adsorbing** porous membrane; (2) passing a washing solution through the nucleic acid **adsorbing** porous membrane to wash the nucleic acid **adsorbing** porous membrane while **adsorbing** the nucleic acid; and (3) passing an elution solution through the nucleic acid **adsorbing** porous membrane to desorb the nucleic acid from the nucleic acid **adsorbing** porous membrane, wherein the nucleic acid **adsorbing** porous membrane is a porous membrane capable of **adsorbing** the nucleic acid by interaction involving substantially no ionic bond, and a step of drying the nucleic acid **adsorbing** porous membrane **adsorbing** the nucleic acid is not included between the washing step (2) and the recovering step (3).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 3 OF 4 USPATFULL on STN
AN 2005:111547 USPATFULL
TI Method for separation and purification method of nucleic acid
IN Komazawa, Hiroyuki, Saitama, JAPAN
Iwaki, Yoshihide, Saitama, JAPAN
Makino, Yoshihiko, Saitama, JAPAN
Amano, Yoshikazu, Saitama, JAPAN
PI US 2005095626 A1 20050505
AI US 2004-932138 A1 20040902 (10)
PRAI JP 2003-311335 20030903
JP 2003-312147 20030904
DT Utility
FS APPLICATION

LREP BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747, US
CLMN Number of Claims: 28
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 952
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides a rapid, convenient, and automatable method for extracting a highly pure nucleic acid in order to carry out nucleic acid analysis smoothly with high accuracy in an array method. An analyzing method includes analyzing a nucleic acid by an array method, the nucleic acid being separated and purified by a separation and purification method which includes the steps of (a) to (f) identified in the specification.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 4 OF 4 USPATFULL on STN
AN 2004:76592 USPATFULL
TI Method for separating and purifying a nucleic acid
IN Mori, Toshihiro, Asaka-shi, JAPAN
Makino, Yoshihiko, Asaka-shi, JAPAN
PI US 2004058370 A1 20040325
AI US 2003-621412 A1 20030718 (10)
PRAI JP 2002-210833 20020719
DT Utility
FS APPLICATION
LREP BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747
CLMN Number of Claims: 18
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 951
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An object of the present invention is to provide a method for separating and purifying a nucleic acid by **adsorbing** the nucleic acid in a test sample to a surface of a **solid phase** and **desorbing** the nucleic acid by washing and the like. The present invention provides a method for separating and **purifying** **RNA** from a nucleic acid mixture, comprising a step of: **adsorbing** and **desorbing** a nucleic acid in the nucleic acid mixture containing RNA and DNA to and from a **solid** **phase** of an organic macromolecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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